In re Application: Schack et al.

Application No.: 10/591,818

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Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of claims in the

application.

Listing of Claims:

1. (Currently Amended) A portable communication device comprising:

an antenna feeding circuit;

a first part having a hollow interior and a main section having a width, length and a

first height and including a plurality of electrical elements; and

an antenna system comprising:

a ground plane located within and extending along the width and the length of the

main section; and

an antenna element located within the first part,

wherein the ground plane is provided in one piece, wherein the plurality of electrical

elements of the first part includes radio transmission elements electrically connected to said

ground plane, wherein the ground plane and the antenna element are provided from a same

unitary piece of material on a same substrate, and wherein the antenna element is distanced

from the ground plane by at least approximately the first height in a height direction of the

first part.

2. (Currently Amended) A portable communication device according to claim 1,

further comprising:

a user interface in the first part,

wherein the ground plane and the user interface arranged in the first part are provided

on [[a]] the same substrate.

3. (Previously Presented) A portable communication device according to claim

1, further comprising:

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a second part connected to the first part,

wherein the first part has a hinging section for providing rotation of the first part in relation to said second part around an axis of rotation.

- 4. (Previously Presented) A portable communication device according to claim 3, wherein the ground plane is connected to said second part via the hinging section for providing a common ground potential in both parts.
- 5. (Previously Presented) A portable communication device according to claim 4, wherein the antenna feeding circuit is in the second part.
- 6. (Previously Presented) A portable communication device according to claim 3, wherein the hinging section includes a hollow hinge cavity and has a second height greater than the first height, and wherein the antenna element is inside the hinging section.
- 7. (Previously Presented) A portable communication device according to claim 6, wherein a portion of the ground plane extends into the hinging section.
- 8. (Currently Amended) A portable communication device according to claim 7, comprising:

an antenna feeding circuit;

a first part having a hollow interior, a main section having a width, length and a first height and including a plurality of electrical elements, and a hinging section, wherein the hinging section includes a hollow hinge cavity and has a second height greater than the first height;

a second part connected to the first part, wherein the hinging section provides rotation of the first part in relation to the second part around an axis of rotation; and an antenna system comprising:

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an antenna element located within the first part, wherein the antenna element is inside the hinging section; and

a ground plane located within and extending along the width and the length of the main section, wherein a portion of the ground plane extends into the hinging section, and wherein the ground plane includes a bent section within the hinging section and bent away from a portion of the ground plane in the main section for providing an increased distance between the ground plane and the antenna element in the hinge cavity corresponding to the second height,

wherein the ground plane is provided in one piece, wherein the plurality of electrical elements of the first part includes radio transmission elements electrically connected to said ground plane, wherein the ground plane and the antenna element are provided from a same piece of material on a same substrate, and wherein the antenna element is distanced from the ground plane by at least approximately the first height in a height direction of the first part.

- 9. (Previously Presented) A portable communication device according to claim 1, wherein the antenna element is a multiband antenna element.
- 10. (Previously Presented) A portable communication device according to claim 1, wherein the antenna element is a PIFA antenna element.
- 11. (Previously Presented) A portable communication device according to claim 1, wherein the antenna element is a monopole antenna element.
- 12. (Previously Presented) A portable communication device according to claim 1, wherein the portable communication device is a cellular phone.
- 13. (Currently Amended) An antenna system for use in a portable communication device, the device having an antenna feeding circuit and a first part with a hollow interior and a main section having a width, length and a first height and including a

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plurality of electrical elements, the antenna system comprising:

a ground plane located within and extending along the width and the length of the main section; and

an antenna element located within the first part,

wherein the ground plane is provided in one piece, wherein the plurality of electrical elements of the first part includes radio transmission elements electrically connected to the ground plane, wherein the ground plane and the antenna element are provided from a same unitary piece of material on a same substrate, and wherein the antenna element is distanced from the ground plane by at least approximately the first height in a height direction of the first part.

- 14. (New) The antenna system according to claim 13, wherein the ground plane includes a bent section that is bent away from a portion of the ground plane in the main section for providing an increased distance between the ground plane and the antenna element.
- 15. (New) A portable communication device according to claim 8, further comprising:

a user interface in the first part,

wherein the ground plane and the user interface arranged in the first part are provided on the same substrate.

- 16. (New) A portable communication device according to claim 8, wherein the ground plane is connected to said second part via the hinging section for providing a common ground potential in both parts.
- 17. (New) A portable communication device according to claim 16, wherein the antenna feeding circuit is in the second part.

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- 18. (New) A portable communication device according to claim 8, wherein the antenna element is a multiband antenna element.
- 19. (New) A portable communication device according to claim 8, wherein the antenna element is a PIFA antenna element.
- 20. (New) A portable communication device according to claim 8, wherein the antenna element is a monopole antenna element.